



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,394	09/30/2003	Christopher Evans	19111.0127	1585
23517	7590	08/22/2006	EXAMINER	
BINGHAM MCCUTCHEN LLP			CORRIELUS, JEAN M	
3000 K STREET, NW				
BOX IP			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20007			2162	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/673,394	EVANS ET AL.
	Examiner	Art Unit
	Jean M. Corrielus	2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 June 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-7 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

1. This office action is in response to the request for consideration filed on June 20, 2006, in which claims 1-7 are pending for further examination.

Response to Arguments

2. Applicant's arguments filed June 20, 2006 have been fully considered but they are not persuasive. (See Examiner remark).

Arrangement of the Specification

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

4. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), “Sequence Listings” (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A “MICROFICHE APPENDIX” (See MPEP § 608.05(a). “Microfiche Appendices” were accepted by the Office until March 1, 2001.)

(f) BACKGROUND OF THE INVENTION.

- (1) Field of the Invention.**
- (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.**

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

- (i) DETAILED DESCRIPTION OF THE INVENTION.**
- (j) CLAIM OR CLAIMS** (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE** (commencing on a separate sheet).
- (l) SEQUENCE LISTING** (See MPEP § 2424 and 37 CFR 1.821-1.825. A “Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

Drawings

5. Applicants are required to furnish the formal drawings in response to this office action if

the formal drawings have not been submitted. No new matter may be introduced in the required drawings. Failure to timely submit a drawing will result in ABANDONMENT of the application.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-7 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention. Tow (hereinafter “Tow”) US Patent no. 5,761,654.

As to claim 1, Tow discloses a system for reorganizing a structured Query language (SQL) statement to make an execution of the statement by a computer more efficient. In particular, Tow discloses the claimed “determining in the SQL statement a unique identifier to a row of the master table” a unique identifier (primary key) to a row of the master table defining relationship between tables (col.4, lines 41-48; col.7, lines 13-24); “equating the unique identifier to an identifier to related rows of the detail table using the join condition” using the join condition, the detail table A that has a foreign key match with a given primary key in the table B (col.6, lines 55-65), such primary key of a row in the table master is linked to the foreign key of a row in the detail table. Applicant should duly note the Akey represents a non-uniquely indexed foreign key (in table A) pointing at the primary key for table B (col.4, lines 51-67). Tow further discloses the claimed “producing a revised SQL statement that only refers to the detail table using the identifier to the at least one row of the detail table” (col.7, lines 27-56; col.9, lines 32-35); and “processing the revised SQL statement”(col.9, lines 56-58).

As to claim 2, Tow discloses the claimed “wherein the unique identifier to a row of the matter table is indexed” (col.6, lines 47-48).

As to claim 3, Tow discloses the claimed “wherein the unique identifier to a row of the matter table is a primary key” (col.4, lines 47-48).

As to claim 4, Cheng discloses the claimed “wherein the unique identifier to a row of the detail table is a foreign key” (col.4, lines 49-50).

As to claim 5, Cheng discloses the claimed “wherein the join condition is an equality between a column of the master table and a column of the detail table” (col.6, lines 53-65; col.7, lines 1-11).

As to claim 6, Tow discloses a system performed by a computer for executing program of instructions (col.4, lines 36-38) to perform the steps of claim 1.

As to claim 7, Tow discloses program of instructions stored in computer system (col.4, lines 36-38) to perform the steps of claim 1.

Remark

8. Applicant asserted that Tow does not preventing processing of a join between two tables, rather Tow eliminates rows from a join statement. Applicant is also admitted that Tow processes joins between two tables even though it may eliminate some rows of table in the join when execution the join statement. The examiner has carefully considered the subject matter as argued by the Applicant, the rejections advanced by the examiner, and the evidence of anticipation relied upon by examiner as support for the rejections. In rejecting the claims under 35 U.S.C. 102, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of anticipation and to provide substantial lines of evidence as to where each limitation is found in the prior art to arrive at the claimed invention. These showings by the examiner are an essential part of complying with the burden of presenting a *prima facie* case of anticipation. The examiner's position (detailed action's pages 1-5) with respect to the assertion above is that Tow discloses a system for reorganizing a structured Query language (SQL) statement to make an execution of the statement by a computer more efficient. In particular, Tow discloses the claimed "determining in the SQL statement a unique identifier to a row of the master table" a unique identifier (primary key) to a row of the master table defining relationship between tables (col.4, lines 41-48; col.7, lines 13-24); "equating the unique identifier to an identifier to related rows of the detail table using the join condition" using the join condition, the detail table A that has a foreign key match with a given primary key in the table B (col.6, lines 55-65), such primary key of a row in the table master is linked to the foreign key of a row in the detail table. Applicant should duly note the Akey represents a non-uniquely indexed foreign key (in table A) pointing at the primary key for table B (col.4, lines 51-67). Tow further discloses the claimed "producing a

revised SQL statement that only refers to the detail table using the identifier to the at least one row of the detail table" (col.7, lines 27-56; col.9, lines 32-35); and "processing the revised SQL statement"(col.9, lines 56-58). Second, in response to applicant's assertions, the recitation "prevent processing of a join between tables in a database" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Applicant (page 3) stated that the present invention is directed to a method of preventing executions of unnecessary join operations. Applicant admitted that present invention is actually performed join operation when is needed but only when the join operations are prevented when they are unnecessary. Similarly, Tow discloses a system for reorganizing a structured Query language (SQL) statement by creating a data structure representation of a join statement (col.6, lines 5-52; col.7, lines 1-12). Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, as argued (page 3) by the applicant that present invention is relied on preventing unnecessary joins between table in a database, wherein using a new SQL statement would eliminate a join operation without filtering the results. The aforementioned assertion does not eliminate the join statement, in fact the new SQL statement would not filter the query result to eliminate the join statement.

Applicants are reminded that the examiner is entitled to the broadest reasonable interpretation of the claims. The Applicants always have the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater* 162 USPQ 541, 550-51 (CCPA 1969).

Additionally, with respect to each of the cited claims, Applicant generally alleged that the Bentley does not teach each and every claimed limitation without actually detailing the reasons why. In response to such allegations, the Examiner submits that rejection of claims 1-7 is sustained since the claimed was properly rejected over Tow's reference and as discussed in the foregoing remarks. Consequently, Applicants have failed to successfully rebut the rejection of the cited claims. It has also been held that Applicants bear the burden of explaining why the evidence on which the Examiner relies is insufficient to establish a prima facie case or demonstrating that Applicant has provided evidence, which rebuts the prima facie case. See *In re Rouffet*, 149 F.3d 1350, 1355 47 USPQ2d 1453, 1455 (Fed. Cir. 1998).

Thus, for the above reasons, it is believed that the rejection under 35 U.S.C. 102 provides substantial evidence to support the rationale statement in the above rejection, and the rejection under 35 U.S.C. 102 should be sustained.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jean M Corrielus
Primary Examiner
Art Unit 2162

August 21, 2006